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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,265	03/28/2001	Wolfgang Fraas	P01,0047	6597
21171	7590	08/09/2006	EXAMINER HARPER, KEVIN C	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			ART UNIT 2616	PAPER NUMBER

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/806,265	FRAAS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin C. Harper	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

Applicant's arguments filed May 23, 2006 have been fully considered but they are not persuasive.

1. Applicant argued that Keshav does not disclose transmitting a data packet formed of substructural elements. However, fig. 4, item 425 shows encapsulating/de-encapsulating ATM cells in an IP packet (col. 6, lines 40-56; fig. 7, steps 730 and 750; fig. 8, step 820; col. 2, line 61 through col. 3, line 2).
2. Applicant argued that Keshav in view of Jeon does not make obvious a hub. However, Jeon discloses a hub (fig. 15, item 1501) that has direct inputs to connected devices. The motivation of the combination is to provide the direct inputs from devices (Jeon, col. 17, lines 43-55). Applicant argued that the ATM network 300 would have to be removed in Keshav, yet this is the benefit derived from Jeon. As seen in Jeon, all devices are connected directly to the inputs of the switch 1501.
3. Applicant argued that the cell switching unit of Jeon would replace the hub. However, only a motivation to provide a hub in the invention in Keshav was given. The combination suggests and makes obvious the gateway of Keshav having hub functionality.
4. Applicant argued that Jeon does not disclose a hub. However, a hub as defined in the specification provides direct inputs to several devices (page 5, lines 17-21). Similarly, the cell switching unit of Jeon provides several direct inputs to devices (fig. 15). The combination of Keshav and Jeon makes obvious a hub for connection to a packet-oriented network and for providing several direct inputs to devices.

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5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The motivation found in Jeon is to allow a communications device to have direct inputs to the terminals it supports (col. 17, lines 43-55).

6. Applicant argued that Keshav in view of Duault does not disclose inserting substructural elements into data packets. However, in Duault substructural elements (fig. 5, CIDn; col. 6, lines 33-45; fig. 4) are inserted into ATM cells. In Keshav, ATM cells are inserted into IP packets. Therefore, the IP packets that contain ATM cells have data from several users as suggested by Keshav in view of Duault.

7. Applicant argued that the combination of references does not teach the claimed invention. However, the function of the system of Keshav is not diminished or made inoperative by the addition of direct inputs to the gateway of Keshav as evidenced by Jeon, the addition of an access unit for the switching system of Keshav as evidenced by Farris, or the addition of having substructural elements from other communication terminals in the packets of Keshav as evidenced by Duault. The combination of references provides a teaching that compliments the Keshav reference making the presently claimed invention obvious over the combination of reference for the motivation provided.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. (US 5,623,605) in view of Jeon et al. (US 5,548,589), Farris et al. (US 6,721,306) and Duault et al. (US 5,930,265).

8. Regarding claims 8-9, 11-12 and 15, Keshav discloses a method of transmitting data between communication terminals (fig. 3, items 320-324) and a switching system (item 333) via a packet-oriented communications network (item 310). The method comprises setting up a data format formed of substructural elements (col. 5, lines 11-22) for the data transmission between the switching system (item 333) and the terminals (fig. 6), where the communications terminals are connected to the packet-oriented network via a gateway (item 100), transmitting the data to the gateway and inserting substructural elements into data packets by the gateway (fig. 4, item 425) and transmitting the data packets toward the switching system (fig. 4, item 11).

9. However, Keshav does not disclose that the gateway is a hub with subscriber interfaces for each of the communication terminals. Jeon discloses a hub (fig. 15, item 1501 or fig. 16, item 1601) having interfaces for communication terminals (item 1602). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a hub in the network of Keshav in order to provide a direct connection for user terminals (Jeon, col. 17, lines 43-55).

10. Further, Keshav in view of Jeon does not disclose that the switching system is connected to the packet-oriented network via an access unit. Farris discloses a switching system (fig. 2,

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item 5) having terminals (items 79 and 81) and an access unit (item 77) interfacing a packet-oriented network (item 349; col. 4, line 45). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have an access unit for the switching system of Keshav in view of Jeon in order to interconnect local switching systems (Farris, fig. 3, items 328 and 330; col. 4, lines 26-29).

11. Further, Keshav in view of Jeon and Farris does not disclose inserting substructural elements from different communication terminals into a common data packet. Duault discloses a substructural unit (ATM cell) that includes data from other users (fig. 5, SSCS trailer; note: CID 1, CID2, CIDn). Further regarding claim 11, the substructural subunit has a cell header (fig. 5, SSCS trailer) and channel identifier (CIDn) for association with a communication terminal, where the cell header has a length indicator (CID1, CID2, CIDn) specifying the number of payload segments in the substructural element. Further regarding claim 12, the substructural elements are according to AAL, which includes a standardized AAL-2 (col. 2, lines 12-18). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have data from several users in a data packet in the invention of Keshav in view of Jeon and Farris in order to efficiently transmit an ATM cell (Duault, col. 3, lines 57-62).

12. Further, Keshav in view of Jeon, Farris and Duault does not specifically disclose that the access unit extracts substructural elements and forwards them to the switching system.

However, in Keshav a gateway (figs. 3 and 4, item 100) extracts substructural elements from received packets (fig. 4, item 425; note: decapsulator). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have an access unit that decapsulates

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packets for the switching system of Keshav in order to provide data transfer of ATM cells over the Internet (Keshav, col. 1, line 60 through col. 2, line 3; col. 3, lines 24-29).

13. Regarding claim 10, in Keshav the data packets are IP data packets (fig. 4, item 310).

14. Regarding claim 13, in Keshav the data packets are stored in an IP payload (fig. 7; col. 12, lines 43-50).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav in view of Jeon, Farris, and Duault as applied to claim 13 above, and further in view of Lo et al. (US 6,324,178).

15. Regarding claim 14, Keshav in view of Jeon, Farris, and Duault does not disclose pointers in a data packet designating the start address of a substructural unit in a payload. Lo discloses a pointer for designating a start address of a substructural element (fig. 3A, item 332). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a pointer in a data packet in the invention of Keshav in view of Jeon, Farris, and Duault in order to properly decapsulate data cells of a data packet (Lo, col. 6, lines 43-54).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is [kevin.harper@uspto.gov](mailto:kevin.harper@uspto.gov).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see [portal.uspto.gov](http://portal.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

August 6, 2006